

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A non allergenic, rising food flour, derived from the seed of a plant expressing in said seed a gene coding for the transglutaminase enzyme and one or more gene coding for wheat storage proteins, wherein said wheat storage proteins comprises a preserved C-terminal motif LKVAKAQQLAAQLPAMCR (SEQ ID NO:11) and are selected from the group consisting of 1Bx7, 1By9, 1Dx5, 1Dy10, 1Ax2, 1Bx17, 1Ax1, 1Dy12, ~~1Dy10~~ and HMW2 and are optionally modified ~~by with techniques of site directed mutagenesis in order~~ to eliminate allergenic ~~amineacid~~ amino acid sequences for food allergies to gluten, and wherein said plant is a cereal or a leguminosa provided that said plant is not wheat.

2. (currently amended) The food flour of ~~claim~~ Claim 1 wherein the sequences to be modified are selected from the group consisting of PFPQPQLPY, PQPQLPYPQ, PYPQPQLPY, LQLQFPFPQPQLPY, QQGYPTSPQQSG, QQGYPTS, PFSQQQQQ, QSEQSQQPFQPQ and QXPQQPQQF SEQ ID NOS:36-44.

3. (currently amended) The food flour of ~~claim~~ Claim 2 wherein the ~~site-directed~~ mutagenesis is directed to ~~amineacid~~ amino acid in position 6 for PFPQPQLPY, ~~amineacid~~ amino acid in position 4 for PQPQLPYPQ, ~~amineacid~~ amino acid in position 6 for PYPQPQLPY, ~~amineacid~~ amino acid in position 10 for LQLQFPFPQPQLPY, ~~amineacids~~ amino acid in ~~position~~ positions 5 and 8 for QQGYPTSPQQSG, ~~amineacids~~ amino acids in ~~position~~ positions 5 and 8 for QQGYPTS, ~~amineacids~~ amino acids in positions 4,5 and 7 for PFSQQQQQ, ~~amineacids~~ amino acids in positions 4 and 6 for QSEQSQQPFQPQ, ~~or amineacid~~ amino acid in position 4 for QXPQQPQQF (SEQ ID NOS: 36-44).

4. (currently amended) The food flour of ~~anyone of claims~~ Claim 1 ~~to 3~~ wherein the cereal plant is rice, soybean or corn.

5. (currently amended) A transgenic plant expressing in seed a gene coding for the transglutaminase enzyme and one or more gene coding for wheat storage proteins, wherein said wheat storage proteins comprises a preserved C-terminal motif LKVAKAQQLAAQLPAMCR (SEQ ID NO:11) and are selected from the group consisting of 1Bx7, 1By9, 1Dx5, ~~1dy10~~ 1Dy10, 1Ax2, 1Bx17, 1Ax1, 1Dy12, ~~1Dy10~~ and HMW2 and are optionally modified with by techniques of site directed mutagenesis in order to eliminate allergenic ~~amineacid~~ amino acid sequences for food allergies to gluten, and wherein said plant is a cereal or a leguminosa provided that said plant is not wheat.

6. (currently amended) The plant of Claim 5 wherein the sequences to be modified are selected from the group consisting of PFPQPQLPY, PQPQLPYPQ, PYPQPQLPY, LQLQFPQPQLPY, QQGYYPTSPQQSG, QQGYYPTS, PFSQQQQQ, QSEQSQQPFQPQ and QXPQQPQQF (SEQ ID NOS:36-44).

7. (currently amended) The plant of Claim 6 wherein the ~~site directed~~ mutagenesis is directed to ~~amineacid~~ amino acid in position 6 for PFPQPQLPY, ~~amineacid~~ amino acid in position 4 for PQPQLPYPQ, ~~amineacid~~ amino acid in position 6 for PYPQPQLPY, ~~amineacid~~ amino acid in position 10 for LQLQFPQPQLPY, ~~amineacids~~ amino acids in ~~position~~ positions 5 and 8 for QQGYYPTSPQQSG, ~~amineacids~~ amino acids in ~~position~~ positions 5 and 8 for QQGYYPTS, ~~amineacids~~ amino acids in positions 4,5 and 7 for PFSQQQQQ, or ~~amineacids~~ amino acids in positions 4 and 6 for QSEQSQQPFQPQ, ~~amineacid~~ amino acid in position 4 for QXPQQPQQF (SEQ ID NOS:36-44).

8. (currently amended) The plant of ~~anyone of claims~~ Claim 5 ~~to 7~~, wherein said plant is rice, soybean or corn.

9. (currently amended) A seed produced by the plant of ~~anyone of claims~~ Claim 5 ~~to 8~~ wherein said seed expresses the transglutaminase enzyme and one or more gene coding for wheat storage proteins, wherein said wheat storage proteins comprises a preserved C-terminal motif of LKVAKAQQLAAQLPAMCR (SEQ ID NO:11) and are

selected from the group consisting of 1Bx7, 1By9, 1Dx5, ~~1dy10~~ 1Dy10, 1Ax2, 1Bx17, 1Ax1, 1Dy12, ~~1Dy10~~ and HMW2 and are optionally modified ~~with techniques of site directed by~~ mutagenesis ~~in order~~ to eliminate allergenic ~~aminoacid~~ amino acid sequences for food allergies to gluten, and wherein said plant is a cereal or a leguminosa provided that said plant is not wheat.

10. (currently amended) A process for the production of ~~flours~~ flour ~~form~~ from the seeds of Claim 9, comprising the step of milling said seeds.

11. (currently amended) A process for producing a baked product comprising the steps of admixing the flour as defined in ~~anyone of claims~~ Claim 1 ~~to 4~~ with a suitable amount of yeast, allowing said flour to raise and baking the obtained dough.

12. (currently amended) A baked product ~~obtainable~~ obtained by the process of ~~claim~~ claim 11.